

11549293

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* * * * * Welcome to STN International * * * * *

| | | | |
|------|----|--------|--|
| NEWS | 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | AUG 06 | CAS REGISTRY enhanced with new experimental property tags |
| NEWS | 3 | AUG 06 | FSTA enhanced with new thesaurus edition |
| NEWS | 4 | AUG 13 | CA/CAPplus enhanced with additional kind codes for granted patents |
| NEWS | 5 | AUG 20 | CA/CAPplus enhanced with CAS indexing in pre-1907 records |
| NEWS | 6 | AUG 27 | Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB |
| NEWS | 7 | AUG 27 | USPATOLD now available on STN |
| NEWS | 8 | AUG 28 | CAS REGISTRY enhanced with additional experimental spectral property data |
| NEWS | 9 | SEP 07 | STN AnaVist, Version 2.0, now available with Derwent World Patents Index |
| NEWS | 10 | SEP 13 | FORIS renamed to SOFIS |
| NEWS | 11 | SEP 13 | INPADOCDB enhanced with monthly SDI frequency |
| NEWS | 12 | SEP 17 | CA/CAPplus enhanced with printed CA page images from 1967-1998 |
| NEWS | 13 | SEP 17 | CAPplus coverage extended to include traditional medicine patents |
| NEWS | 14 | SEP 24 | EMBASE, EMBAL, and LEMBASE reloaded with enhancements |
| NEWS | 15 | OCT 02 | CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt |
| NEWS | 16 | OCT 19 | BEILSTEIN updated with new compounds |
| NEWS | 17 | NOV 15 | Derwent Indian patent publication number format enhanced |
| NEWS | 18 | NOV 19 | WPIX enhanced with XML display format |
| NEWS | 19 | NOV 30 | ICSD reloaded with enhancements |
| NEWS | 20 | DEC 04 | LINPADOCDB now available on STN |
| NEWS | 21 | DEC 14 | BEILSTEIN pricing structure to change |
| NEWS | 22 | DEC 17 | USPATOLD added to additional database clusters |
| NEWS | 23 | DEC 17 | IMSDRUGCONF removed from database clusters and STN |
| NEWS | 24 | DEC 17 | DGENE now includes more than 10 million sequences |
| NEWS | 25 | DEC 17 | TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment |
| NEWS | 26 | DEC 17 | MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary |
| NEWS | 27 | DEC 17 | CA/CAPplus enhanced with new custom IPC display formats |
| NEWS | 28 | DEC 17 | STN Viewer enhanced with full-text patent content from USPATOLD |
| NEWS | 29 | JAN 02 | STN pricing information for 2008 now available |
| NEWS | 30 | JAN 16 | CAS patent coverage enhanced to include exemplified prophetic substances |
| NEWS | 31 | JAN 28 | USPATFULL, USPAT2, and USPATOLD enhanced with new |

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custom IPC display formats
NEWS 32 JAN 28 MARPAT searching enhanced
NEWS 33 JAN 28 USGENE now provides USPTO sequence data within 3 days
of publication
NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:59:57 ON 14 FEB 2008

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=> FILE REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|----------------------|------------|---------|
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 11:00:26 ON 14 FEB 2008

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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6
DICTIONARY FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6

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New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

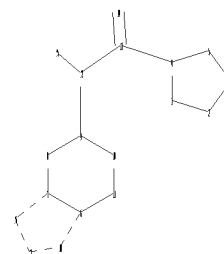
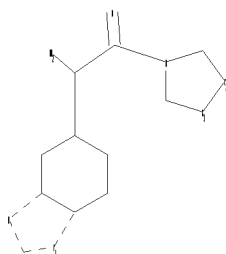
Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
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experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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Uploading C:\Program Files\Stnexp\Queries\10560771.str



chain nodes :

12 13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 16 17 18

chain bonds :

4-13 9-12 12-13 12-15 13-14

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 6-18 7-8 7-16 8-9 9-10 10-11 16-17 17-18

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exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 4-13 6-7 6-11 6-18 7-8 7-16 8-9 9-10 9-12 10-11
12-13 12-15 13-14 16-17 17-18

isolated ring systems :

containing 1 : 6 :

G1:O,S,N,NH

G2:CH₂,CH,CF₂,CF₃

G3:CH₂,CF₂,CF₃,SO₂,SO₃H,S

Match level :

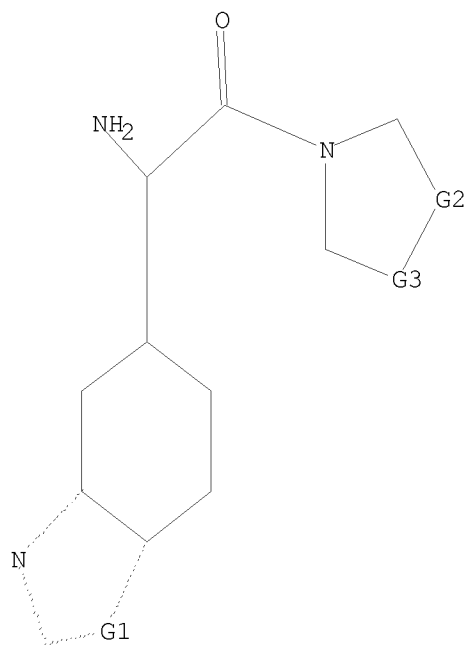
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 O,S,N,NH

G2 CH₂,CH,CF₂,CF₃

G3 CH₂,CF₂,CF₃,SO₂,SO₃H,S

Structure attributes must be viewed using STN Express query preparation.

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=> s l1

SAMPLE SEARCH INITIATED 11:00:48 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 9 TO 360

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 11:00:55 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 161 TO ITERATE

100.0% PROCESSED 161 ITERATIONS 7 ANSWERS

SEARCH TIME: 00.00.01

L3 7 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'HCAPLUS' ENTERED AT 11:01:00 ON 14 FEB 2008

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FILE COVERS 1907 - 14 Feb 2008 VOL 148 ISS 7

FILE LAST UPDATED: 13 Feb 2008 (20080213/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 5 L3

=> s l4 and py<=2003

11549293

23976331 PY<=2003

L5 5 L4 AND PY<=2003

=> d l4 ibib abs hitstr tot

L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2864 HCAPLUS

DOCUMENT NUMBER: 140:59935

TITLE: Preparation of crystalline (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1(pyrrolidinocarbonyl)-ethyl)-benzimidazole esters and/or salts for use as antithrombotic agents

INVENTOR(S): Linz, Guenter; Sieger, Peter; Schreiner, Gunnar; Rall, Werner; Schmid, Rolf

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma Gmbh & Co. Kg, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|------------------|----------|
| WO 2004000818 | A1 | 20031231 | WO 2003-EP6317 | 20030616 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| DE 10227666 | A1 | 20040108 | DE 2002-10227666 | 20020620 |
| CA 2485545 | A1 | 20031231 | CA 2003-2485545 | 20030616 |
| AU 2003237945 | A1 | 20040106 | AU 2003-237945 | 20030616 |
| EP 1529035 | A1 | 20050511 | EP 2003-735629 | 20030616 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2006508037 | T | 20060309 | JP 2004-514726 | 20030616 |
| US 2004010026 | A1 | 20040115 | US 2003-463033 | 20030617 |
| US 7169934 | B2 | 20070130 | | |
| US 2007099974 | A1 | 20070503 | US 2006-610187 | 20061213 |
| US 7294721 | B2 | 20071113 | | |

PRIORITY APPLN. INFO.: DE 2002-10227666 A 20020620
US 2002-395188P P 20020711
WO 2003-EP6317 W 20030616
US 2003-463033 A3 20030617

OTHER SOURCE(S): MARPAT 140:59935

AB The invention relates to the crystalline forms of compds. (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)-ethyl)-benzimidazole and monohydrochloride thereof, to methods for the production thereof, and to their use as medicaments having an antithrombotic action (no data). Thus, (R)-2-(4-

cyanophenylaminomethyl)-1-methyl-5-[1-amino-1-(pyrrolidineocarbonyl)-ethyl]benzimidazole was simultaneously N-alkylated and CN-reduced/aminated using $\text{BrCH}_2\text{C}(\text{O})\text{OCH}_2\text{CH}_2\text{CH}_3$ in N-methylpyrrolidinone, Pr acetate, and diisopropylethylamine; the resulting ester product was first isolated as the hydrochloride, and then as the 4-toluenesulfonic acid salt, which was deesterified to give the free base. The Et ester was similarly prepared. Crystal structure data were given for the free base and the monohydrochloride forms.

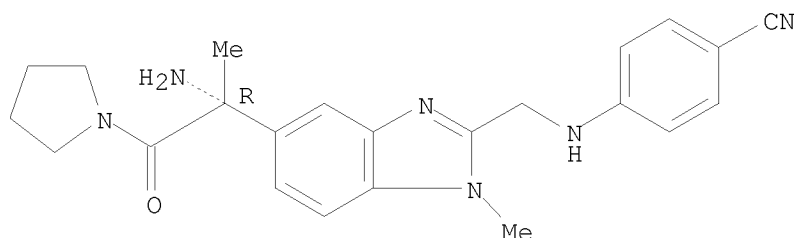
IT 253797-00-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and x-ray crystallog. structure of 2-(4-amidinophenylaminomethyl))-1-methyl-5-(1-(carboxymethylamino)benzimidazole esters and/or salts for use as antithrombotic agents)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2693 HCAPLUS

DOCUMENT NUMBER: 140:53413

TITLE: Benzimidazole derivatives for the treatment of systemic inflammatory response syndrome

INVENTOR(S): Ries, Uwe; Wienen, Wolfgang; Schuly, Uwe

PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2004000310 | A1 | 20031231 | WO 2003-EP6318 | 20030616 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, | | | | |

FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|---------------|----|----------|------------------|----------|
| DE 10227668 | A1 | 20040108 | DE 2002-10227668 | 20020620 |
| CA 2489545 | A1 | 20031231 | CA 2003-2489545 | 20030616 |
| AU 2003278945 | A1 | 20040106 | AU 2003-278945 | 20030616 |
| EP 1517687 | A1 | 20050330 | EP 2003-740255 | 20030616 |
| EP 1517687 | B1 | 20070620 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

| | | | | |
|---------------|----|----------|----------------|----------|
| JP 2006514603 | T | 20060511 | JP 2004-514727 | 20030616 |
| AT 365038 | T | 20070715 | AT 2003-740255 | 20030616 |
| ES 2289305 | T3 | 20080201 | ES 2003-740255 | 20030616 |
| US 2004023975 | A1 | 20040205 | US 2003-600055 | 20030620 |

PRIORITY APPLN. INFO.: DE 2002-10227668 A 20020620
 US 2002-400166P P 20020801
 WO 2003-EP6318 W 20030616

OTHER SOURCE(S): MARPAT 140:53413

AB The invention discloses the use of benzimidazole derivs. for producing a medicament used for treating the systemic inflammatory response syndrome and particularly sepsis. Preparation of (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)ethyl]benzimidazole hydrochloride is described.

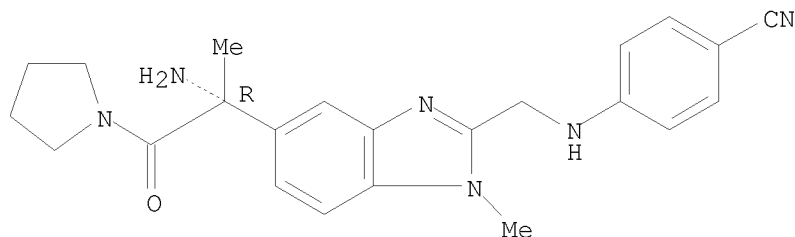
IT 253797-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (benzimidazole derivs. for treatment of systemic inflammatory response syndrome)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[[4-cyanophenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:467997 HCAPLUS

DOCUMENT NUMBER: 135:61338

TITLE: Preparation of 2-(4-amidinophenylaminomethyl)benzimidazoles as antithrombotics

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Huel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 28 pp.

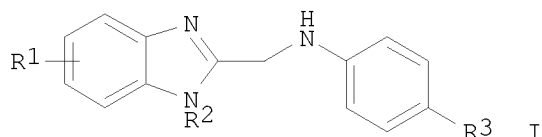
CODEN: GWXXBX

11549293

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| DE 19962329 | A1 | 20010628 | DE 1999-19962329 | 19991223 |
| US 2001006977 | A1 | 20010705 | US 2000-735159 | 20001212 |
| US 6451832 | B2 | 20020917 | | |
| CA 2393916 | A1 | 20010705 | CA 2000-2393916 | 20001216 |
| WO 2001047896 | A1 | 20010705 | WO 2000-EP12841 | 20001216 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1244636 | A1 | 20021002 | EP 2000-983342 | 20001216 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003519129 | T | 20030617 | JP 2001-549368 | 20001216 |
| MX 2002PA06299 | A | 20021209 | MX 2002-PA6299 | 20020621 |
| US 2003004356 | A1 | 20030102 | US 2002-188952 | 20020703 |
| US 6593355 | B2 | 20030715 | | |
| PRIORITY APPLN. INFO.: | | | DE 1999-19962329 | A 19991223 |
| | | | US 2000-175163P | P 20000107 |
| | | | US 2000-735159 | A1 20001212 |
| | | | WO 2000-EP12841 | W 20001216 |

OTHER SOURCE(S): MARPAT 135:61338
 GI



AB Title compds. [I; R1 = alkyl, fluoroalkyl, pyrrolidinocarbonylalkyl, 2,5-dihydropyrrolocarbonylalkyl, aminoalkyl, etc., R2 = alkyl; R3 = carbamidoyl, cyano, (substituted) oxadiazolyl, etc.] and stereoisomers thereof were prepared. Thus, (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(ethoxycarbonylmethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride in H2O was stirred with NaOH for 45 min. at room temperature followed by addition of HCl up to pH = 3.5 to give 100% (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride. Several I extended (doubled) the activated partial thromboplastin time (aPTT) with ED200 = 0.12-0.22 μ M.

IT 253797-00-1P 345957-57-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

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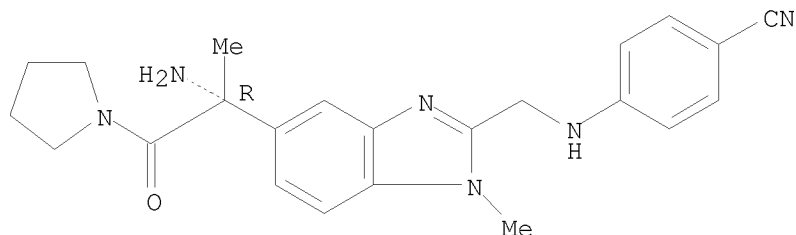
(Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[4-(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

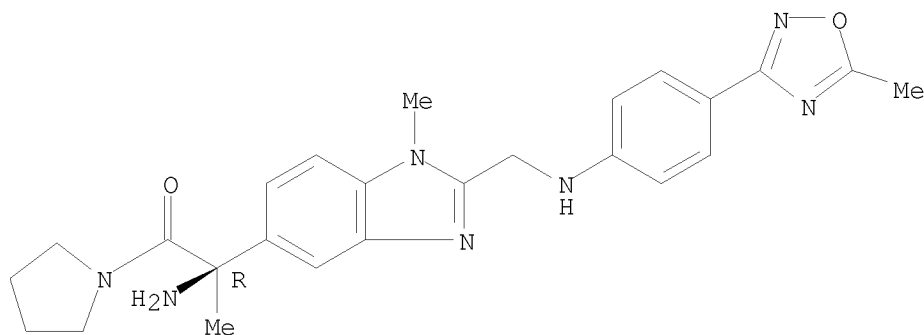
Absolute stereochemistry.



RN 345957-57-5 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:34881 HCAPLUS

DOCUMENT NUMBER: 132:78556

TITLE: Preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Huel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.

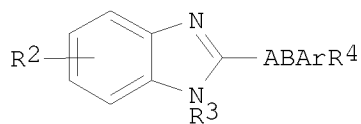
KIND

DATE

APPLICATION NO.

DATE

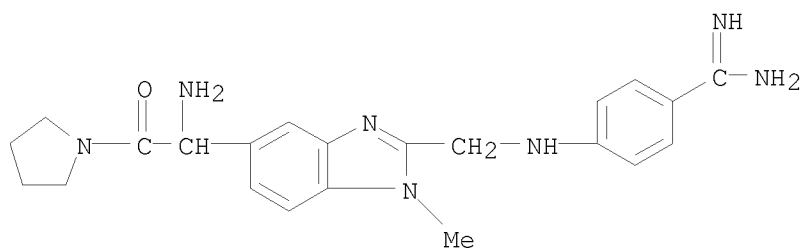
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|------------------------|--|----------|------------------|------------|
| WO 2000001704 | A2 | 20000113 | WO 1999-EP4531 | 19990701 |
| WO 2000001704 | A3 | 20000406 | | |
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| DE 19857202 | A1 | 20000615 | DE 1998-19857202 | 19981211 |
| DE 19912690 | A1 | 20000921 | DE 1999-19912690 | 19990320 |
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| AU 9949033 | A | 20000124 | AU 1999-49033 | 19990701 |
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| EE 4236 | B1 | 20040216 | | |
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| SK 283744 | B6 | 20031202 | SK 2001-8 | 19990701 |
| MX 2000PA12819 | A | 20040603 | MX 2000-PA12819 | 20001219 |
| IN 2000MN00760 | A | 20070615 | IN 2000-MN760 | 20001221 |
| NO 2001000028 | A | 20010103 | NO 2001-28 | 20010103 |
| BG 105111 | A | 20011231 | BG 2001-105111 | 20010103 |
| HR 2001000007 | A1 | 20011231 | HR 2001-7 | 20010103 |
| HR 2001000007 | B1 | 20030430 | | |
| HK 1036976 | A1 | 20041119 | HK 2001-107199 | 20011015 |
| PRIORITY APPLN. INFO.: | | | DE 1998-19829964 | A 19980704 |
| | | | DE 1998-19857202 | A 19981211 |
| | | | DE 1999-19912690 | A 19990320 |
| | | | WO 1999-EP4531 | W 19990701 |
| OTHER SOURCE(S): | MARPAT 132:78556 | | | |
| GI | | | | |



AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, pyrazinylene, pyrimidinylene, pyridazinylene; A = alkylene; B = O, S, CH₂, CO, imino, SO, SO₂; R₂ = R₁COX, etc.; R₁ = alkoxy, amino, alkylamino, dialkylamino, etc.; X = cycloalkylene; R₃ = H, alkyl; R₄ = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride (multistep preparation

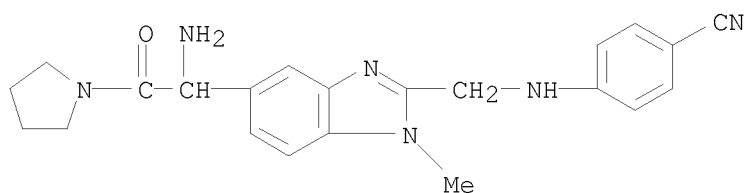
11549293

given) showed aPTT (partial thrombin time) ED200 = 0.12 μ M.
IT 253430-83-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)
RN 253430-83-0 HCAPLUS
CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)



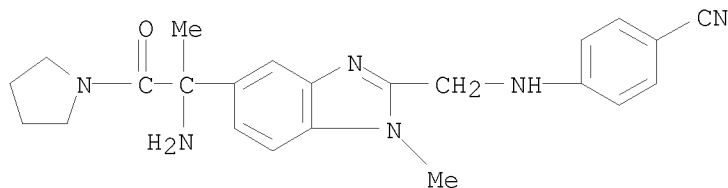
● HCl

IT 253431-62-8P 253431-65-1P 253796-87-1P
253797-00-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)
RN 253431-62-8 HCAPLUS
CN Pyrrolidine, 1-[amino[2-[[[4-(cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)



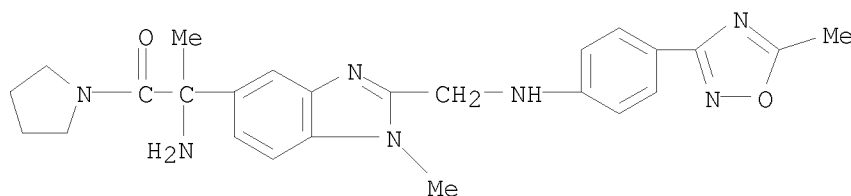
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RN 253796-87-1 HCAPLUS

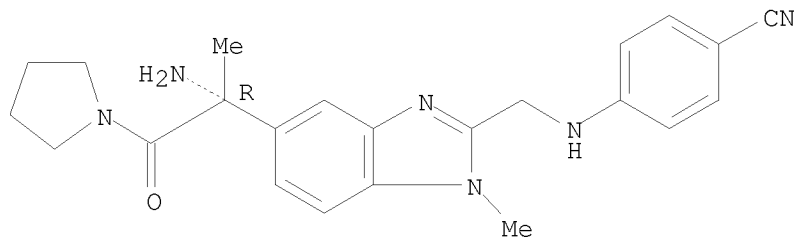
CN Pyrrolidine, 1-[2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)



RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:15648 HCAPLUS

DOCUMENT NUMBER: 132:64257

TITLE: Preparation of amidinophenylaminomethylbenzimidazoles and related compounds as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Huel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 38 pp.

CODEN: GWXXBX

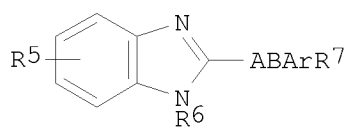
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| DE 19829964 | A1 | 20000105 | DE 1998-19829964 | 19980704 |
| US 6248770 | B1 | 20010619 | US 1999-338970 | 19990624 |
| TW 248435 | B | 20060201 | TW 1999-88110926 | 19990629 |
| CA 2337804 | A1 | 20000113 | CA 1999-2337804 | 19990701 |
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| EE 200100009 | A | 20020617 | EE 2001-9 | 19990701 |
| EE 4236 | B1 | 20040216 | | |
| HU 2002000710 | A2 | 20020629 | HU 2002-710 | 19990701 |
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| JP 2002519429 | T | 20020702 | JP 2000-558106 | 19990701 |
| AT 229511 | T | 20021215 | AT 1999-932765 | 19990701 |
| PT 1095025 | T | 20030430 | PT 1999-932765 | 19990701 |
| ES 2188192 | T3 | 20030616 | ES 1999-932765 | 19990701 |
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| | | | DE 1999-19912690 | A 19990320 |
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| OTHER SOURCE(S): | | | | |
| GI | | | | |
| MARPAT 132:64257 | | | | |



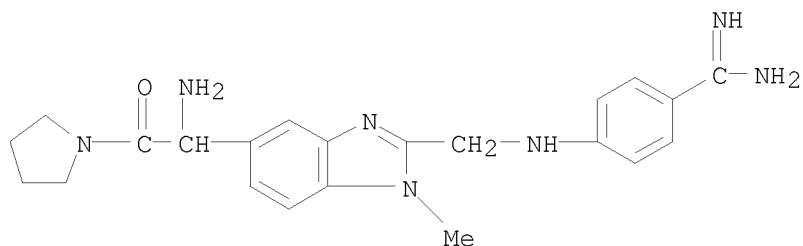
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AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylenes, pyridinylenes, etc.; A = alkylene; B = O, S, CH₂, CO, imino, sulfinyl, sulfonyl, etc.; R₅ = R₁COX; X = cycloalkylene; R₁ = (substituted) (di)alkylamino, cycloalkyleneimino, morpholino, piperazino; R₅ = H, alkyl; R₇ = cyano, (substituted) amidino], were prepared. Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride [prepared starting from 1-(4-chlorophenyl)-1-cyclopropanecarboxylic acid] showed aPTT (partial thrombin time) ED₂₀₀ = 0.12 μ M.

IT 253430-83-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

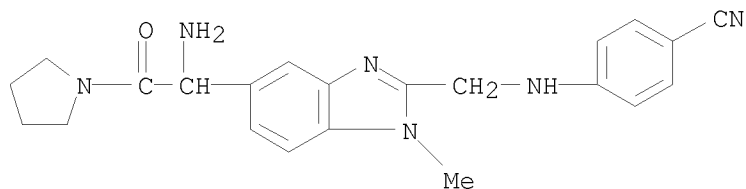


● HCl

IT 253431-62-8P 253431-65-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

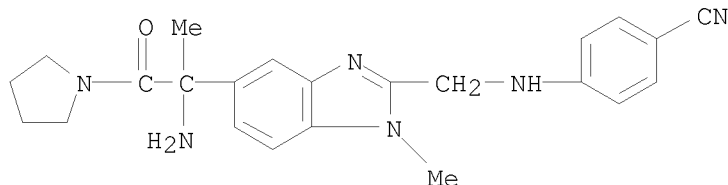
RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)



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RN 253431-65-1 HCAPLUS
CN Pyrrolidine, 1-[2-amino-2-[2-[[[4-cyanophenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS
FULL ESTIMATED COST

| SINCE FILE | TOTAL |
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| 51.46 | 230.03 |

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CA SUBSCRIBER PRICE

| SINCE FILE | TOTAL |
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STRUCTURE FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6
DICTIONARY FILE UPDATES: 13 FEB 2008 HIGHEST RN 1003293-96-6

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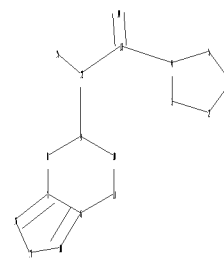
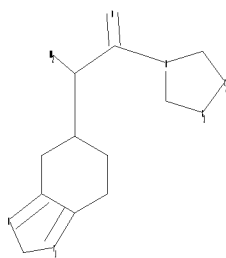
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11549293



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ring nodes :
1 2 3 4 5 6 7 8 9 10 11 16 17 18
chain bonds :
4-13 9-12 12-13 12-15 13-14
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-11 6-18 7-8 7-16 8-9 9-10 10-11 16-17 17-18

exact/norm bonds :
1-2 1-5 2-3 3-4 4-5 4-13 6-7 6-11 6-18 7-8 7-16 8-9 9-10 9-12 10-11
12-13 12-15 13-14 16-17 17-18
isolated ring systems :
containing 1 : 6 :
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G1:O,S,N,NH

G2:CH₂,CH,CF₂,CF₃

11549293

G3:CH2,CF2,CF3,SO2,SO3H,S

Match level :

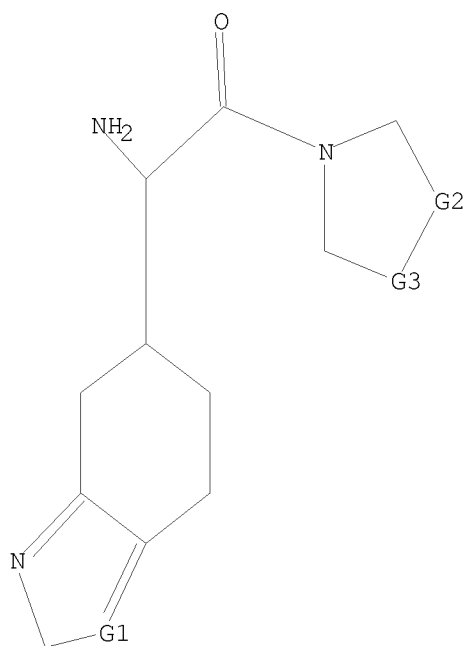
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L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

L6 STR



G1 O, S, N, NH

G2 CH2, CH, CF2, CF3

G3 CH2, CF2, CF3, SO2, SO3H, S

Structure attributes must be viewed using STN Express query preparation.

=> s 16

SAMPLE SEARCH INITIATED 11:06:33 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

11549293

PROJECTED ITERATIONS: 9 TO 360
PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

=> s l6 sss full

FULL SEARCH INITIATED 11:06:39 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 161 TO ITERATE

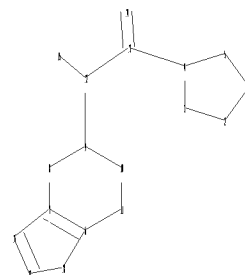
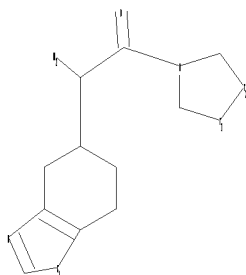
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SEARCH TIME: 00.00.01

0 ANSWERS

L8 0 SEA SSS FUL L6

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chain nodes :

12 13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 16 17 18

chain bonds :

4-13 9-12 12-13 12-15 13-14

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 6-18 7-8 7-16 8-9 9-10 10-11 16-17 17-18

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 4-13 6-7 6-11 6-18 7-8 7-16 8-9 9-10 9-12 10-11
12-13 12-15 13-14 16-17 17-18

isolated ring systems :

containing 1 : 6 :

11549293

G1:O, S, N, NH

G2:CH2, CH, CF2, CF3

G3:CH2, CF2, CF3, SO2, SO3H, S

Match level :

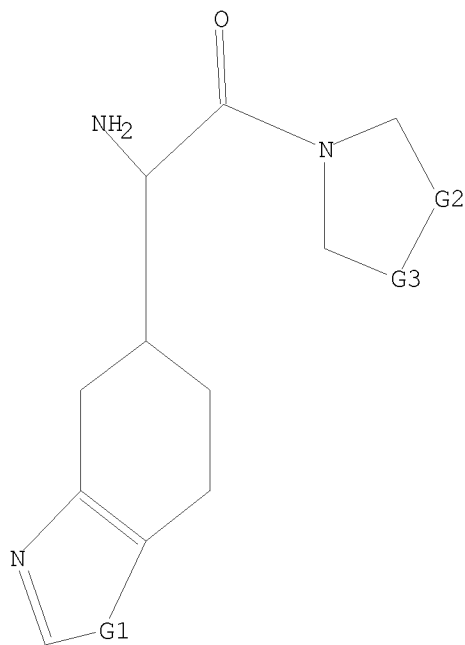
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11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:Atom 17:Atom 18:Atom

L9 STRUCTURE UPLOADED

=> d 19

L9 HAS NO ANSWERS

L9 STR



G1 O, S, N, NH

G2 CH2, CH, CF2, CF3

G3 CH2, CF2, CF3, SO2, SO3H, S

Structure attributes must be viewed using STN Express query preparation.

=> s 19

SAMPLE SEARCH INITIATED 11:11:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED

9 ITERATIONS

1 ANSWERS

11549293

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 9 TO 360
PROJECTED ANSWERS: 1 TO 80

L10 1 SEA SSS SAM L9

=> s l9 sss full
FULL SEARCH INITIATED 11:11:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 161 TO ITERATE

100.0% PROCESSED 161 ITERATIONS 25 ANSWERS
SEARCH TIME: 00.00.01

L11 25 SEA SSS FUL L9

| | | |
|--|------------|---------|
| => FIL HCAPLUS | | |
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| | ENTRY | SESSION |
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| CA SUBSCRIBER PRICE | 0.00 | -4.00 |

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FILE LAST UPDATED: 13 Feb 2008 (20080213/ED)

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11549293

=> s 112 and dipeptidyl peptidase

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L12 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1156435 HCAPLUS
DOCUMENT NUMBER: 142:86665
TITLE: Cyclohexylglycine derivatives as dipeptidyl peptidase
IV inhibitors for the treatment or prevention of
diabetes and other dipeptidyl peptidase IV-associated
diseases
INVENTOR(S): Edmondson, Scott D.; Mastracchio, Anthony; Parmee,
Emma R.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2004112701 | A2 | 20041229 | WO 2004-US18718 | 20040610 |
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| JP 2006528131 | T | 20061214 | JP 2006-517234 | 20040610 |
| IN 2005DN05637 | A | 20080201 | IN 2005-DN5637 | 20051205 |
| US 2007021477 | A1 | 20070125 | US 2005-560771 | 20051213 |
| PRIORITY APPLN. INFO.: | | | US 2003-479246P | P 20030617 |
| | | | WO 2004-US18718 | W 20040610 |
| OTHER SOURCE(S): | MARPAT 142:86665 | | | |

AB The invention discloses cyclohexylglycine derivs. which are inhibitors of dipeptidyl peptidase IV which are useful in the treatment or prevention of diseases in which dipeptidyl peptidase IV is involved, such as diabetes and particularly type 2 diabetes. The invention also discloses pharmaceutical compns. comprising these compds. and the use of these compds. and compns. in the prevention or treatment of such diseases in which the dipeptidyl peptidase IV enzyme is involved. Preparation of compds. and intermediates is described.

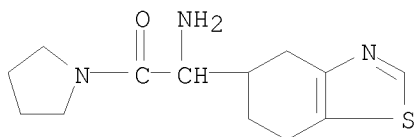
IT 815580-74-6 815580-74-6D, derivs. 815580-75-7 815580-75-7D, derivs. 815580-76-8 815580-76-8D, derivs. 815580-77-9 815580-77-9D, derivs. 815580-79-1 815580-79-1D, derivs. 815580-80-4 815580-80-4D, derivs. 815580-87-1 815580-87-1D, derivs. 815580-88-2 815580-88-2D, derivs. 815580-89-3 815580-89-3D, derivs. 815580-90-6 815580-90-6D, derivs. 815580-91-7 815580-91-7D, derivs. 815580-92-8 815580-92-8D, derivs. 815580-93-9 815580-93-9D, derivs. 815580-94-0 815580-94-0D, derivs. 815580-95-1 815580-95-1D, derivs. 815580-96-2 815580-96-2D, derivs. 815580-97-3 815580-97-3D, derivs. 815580-98-4 815580-98-4D, derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cyclohexylglycine derivs. as dipeptidyl peptidase IV inhibitors for treatment or prevention of diabetes and other dipeptidyl peptidase IV-associated diseases)

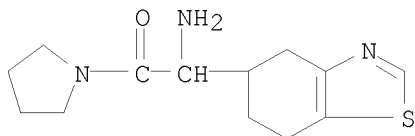
RN 815580-74-6 HCAPLUS

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(CA INDEX NAME)



RN 815580-74-6 HCAPLUS

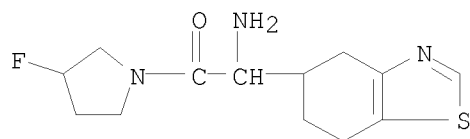
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(CA INDEX NAME)



RN 815580-75-7 HCAPLUS

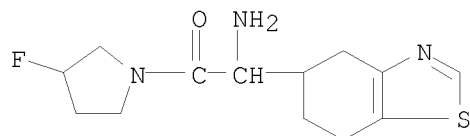
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro- (9CI) (CA INDEX NAME)

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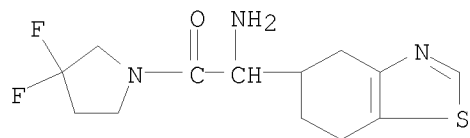
RN 815580-75-7 HCAPLUS

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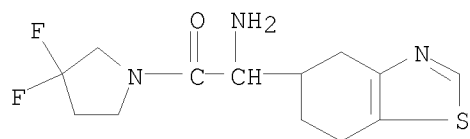
RN 815580-76-8 HCAPLUS

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difluoro- (9CI) (CA INDEX NAME)



RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)

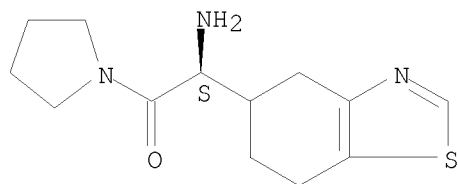


RN 815580-77-9 HCAPLUS

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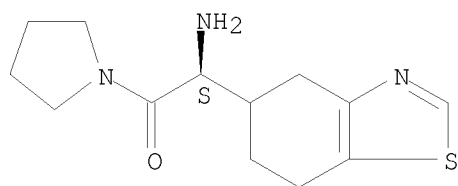
Absolute stereochemistry.

11549293



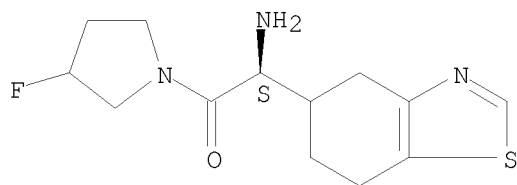
RN 815580-77-9 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



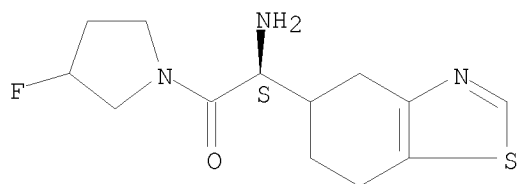
RN 815580-79-1 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-
fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 815580-79-1 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-
fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

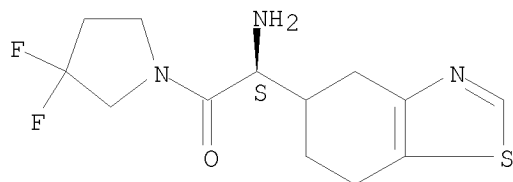


RN 815580-80-4 HCAPLUS
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difluoro- (9CI) (CA INDEX NAME)

11549293

difluoro- (9CI) (CA INDEX NAME)

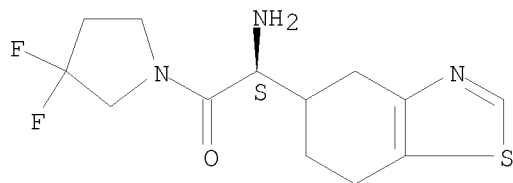
Absolute stereochemistry.



RN 815580-80-4 HCAPLUS

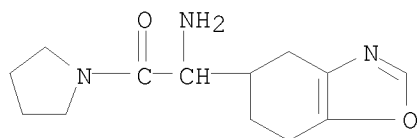
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



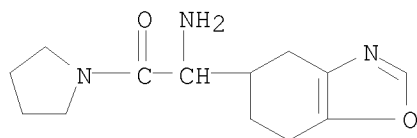
RN 815580-87-1 HCAPLUS

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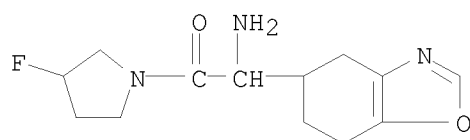
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)



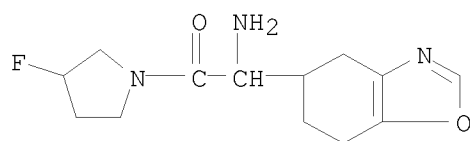
RN 815580-88-2 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro- (9CI) (CA INDEX NAME)

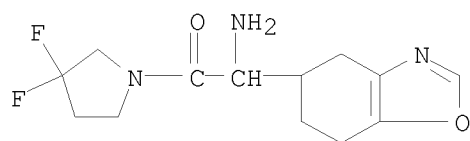
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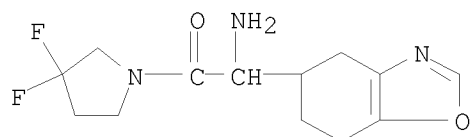
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CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-
(9CI) (CA INDEX NAME)



RN 815580-89-3 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)

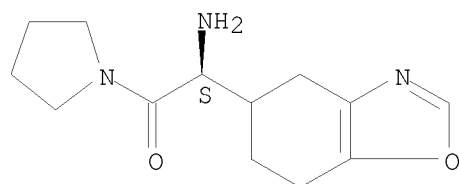


RN 815580-89-3 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)



RN 815580-90-6 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

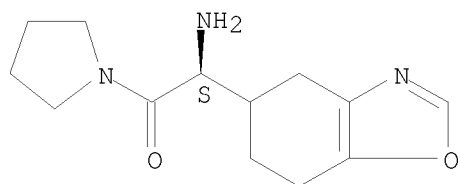


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RN 815580-90-6 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-
(9CI) (CA INDEX NAME)

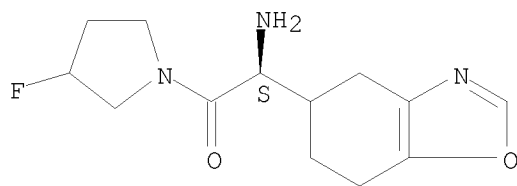
Absolute stereochemistry.



RN 815580-91-7 HCAPLUS

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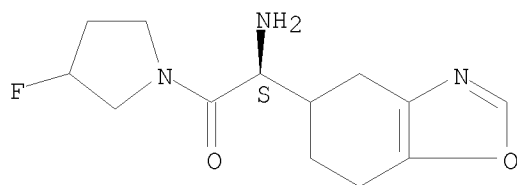
Absolute stereochemistry.



RN 815580-91-7 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-
fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

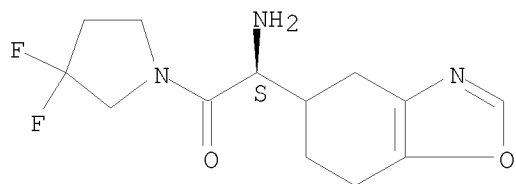


RN 815580-92-8 HCAPLUS

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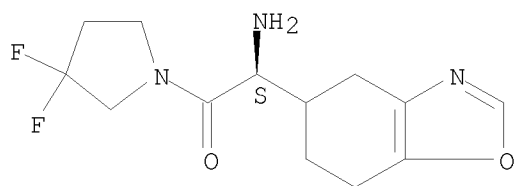
Absolute stereochemistry.

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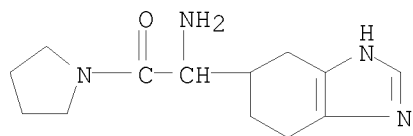


RN 815580-92-8 HCAPLUS
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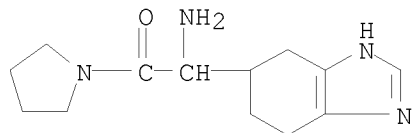
Absolute stereochemistry.



RN 815580-93-9 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

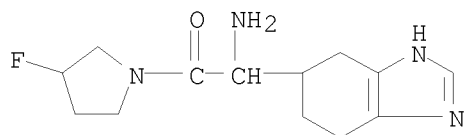


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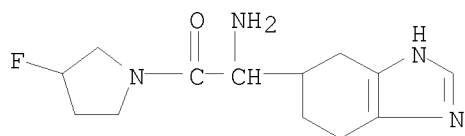


RN 815580-94-0 HCAPLUS
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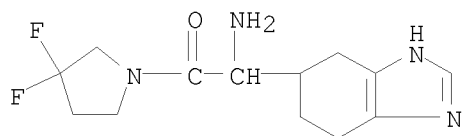
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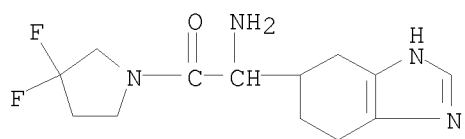
RN 815580-94-0 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro- (9CI) (CA INDEX NAME)



RN 815580-95-1 HCAPLUS
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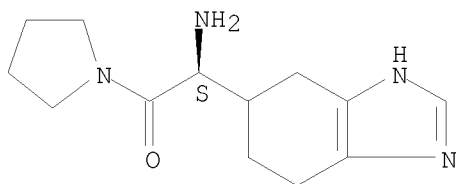
RN 815580-95-1 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)



RN 815580-96-2 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

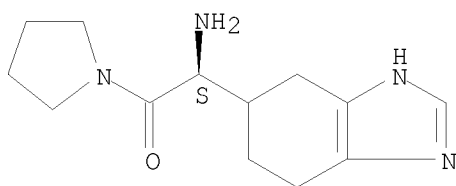
Absolute stereochemistry.

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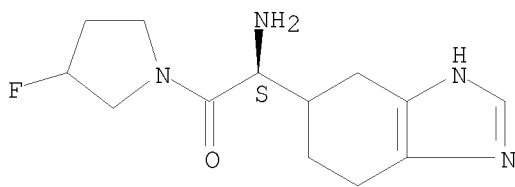
RN 815580-96-2 HCAPLUS
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(9CI) (CA INDEX NAME)

Absolute stereochemistry.



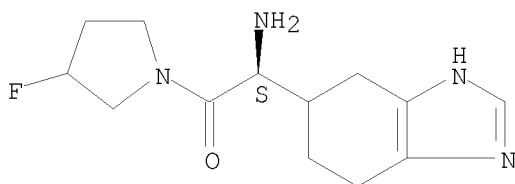
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CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-
3-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 815580-97-3 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-
3-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

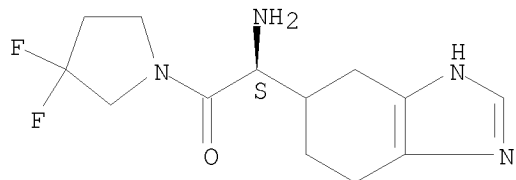


RN 815580-98-4 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-

11549293

3,3-difluoro- (9CI) (CA INDEX NAME)

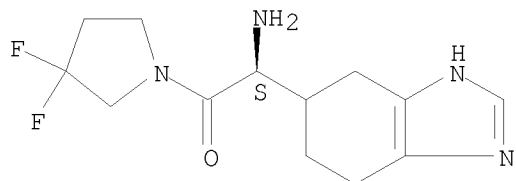
Absolute stereochemistry.



RN 815580-98-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2864 HCAPLUS

DOCUMENT NUMBER: 140:59935

TITLE: Preparation of crystalline (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1(pyrrolidinocarbonyl)-ethyl)-benzimidazole esters and/or salts for use as antithrombotic agents

INVENTOR(S): Linz, Guenter; Sieger, Peter; Schreiner, Gunnar; Rall, Werner; Schmid, Rolf

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma Gmbh & Co. Kg, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2004000818 | A1 | 20031231 | WO 2003-EP6317 | 20030616 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, | | | |

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|----|----------|------------------|----------|
| DE 10227666 | A1 | 20040108 | DE 2002-10227666 | 20020620 |
| CA 2485545 | A1 | 20031231 | CA 2003-2485545 | 20030616 |
| AU 2003237945 | A1 | 20040106 | AU 2003-237945 | 20030616 |
| EP 1529035 | A1 | 20050511 | EP 2003-735629 | 20030616 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006508037 | T | 20060309 | JP 2004-514726 | 20030616 |
| US 2004010026 | A1 | 20040115 | US 2003-463033 | 20030617 |
| US 7169934 | B2 | 20070130 | | |
| US 2007099974 | A1 | 20070503 | US 2006-610187 | 20061213 |
| US 7294721 | B2 | 20071113 | | |

PRIORITY APPLN. INFO.: DE 2002-10227666 A 20020620
US 2002-395188P P 20020711
WO 2003-EP6317 W 20030616
US 2003-463033 A3 20030617

OTHER SOURCE(S): MARPAT 140:59935

AB The invention relates to the crystalline forms of compds. (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)-ethyl)-benzimidazole and monohydrochloride thereof, to methods for the production thereof, and to their use as medicaments having an antithrombotic action (no data). Thus, (R)-2-(4-cyanophenylaminomethyl)-1-methyl-5-[1-amino-1-(pyrrolidineocarbonyl)-ethyl]benzimidazole was simultaneously N-alkylated and CN-reduced/aminated using BrCH₂C(O)OCH₂CH₂CH₃ in N-methylpyrrolidinone, Pr acetate, and diisopropylethylamine; the resulting ester product was first isolated as the hydrochloride, and then as the 4-toluenesulfonic acid salt, which was deesterified to give the free base. The Et ester was similarly prepared. Crystal structure data were given for the free base and the monohydrochloride forms.

IT 253797-00-1

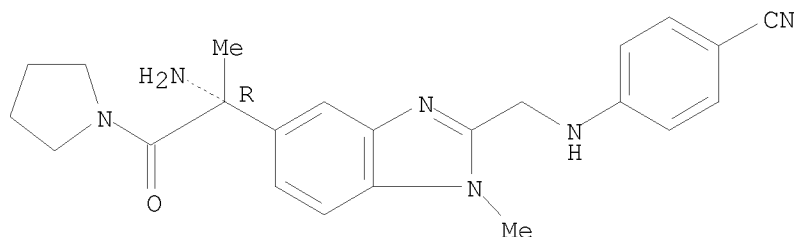
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and x-ray crystallog. structure of 2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)benzimidazole esters and/or salts for use as antithrombotic agents)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

11549293

ACCESSION NUMBER: 2004:2693 HCAPLUS
DOCUMENT NUMBER: 140:53413
TITLE: Benzimidazole derivatives for the treatment of
systemic inflammatory response syndrome
INVENTOR(S): Ries, Uwe; Wienen, Wolfgang; Schuly, Uwe
PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2004000310 | A1 | 20031231 | WO 2003-EP6318 | 20030616 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
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| DE 10227668 | A1 | 20040108 | DE 2002-10227668 | 20020620 |
| CA 2489545 | A1 | 20031231 | CA 2003-2489545 | 20030616 |
| AU 2003278945 | A1 | 20040106 | AU 2003-278945 | 20030616 |
| EP 1517687 | A1 | 20050330 | EP 2003-740255 | 20030616 |
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| JP 2006514603 | T | 20060511 | JP 2004-514727 | 20030616 |
| AT 365038 | T | 20070715 | AT 2003-740255 | 20030616 |
| ES 2289305 | T3 | 20080201 | ES 2003-740255 | 20030616 |
| US 2004023975 | A1 | 20040205 | US 2003-600055 | 20030620 |
| PRIORITY APPLN. INFO.: | | | DE 2002-10227668 | A 20020620 |
| | | | US 2002-400166P | P 20020801 |
| | | | WO 2003-EP6318 | W 20030616 |

OTHER SOURCE(S): MARPAT 140:53413

AB The invention discloses the use of benzimidazole derivs. for producing a medicament used for treating the systemic inflammatory response syndrome and particularly sepsis. Preparation of (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)ethyl]benzimidazole hydrochloride is described.

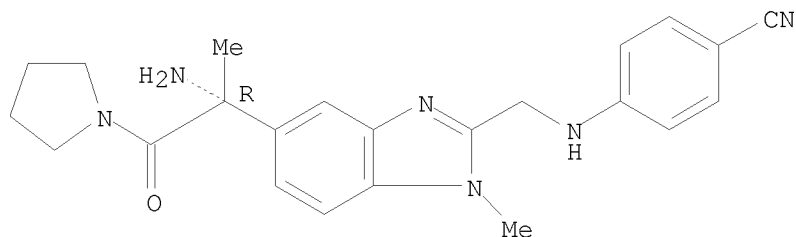
IT 253797-00-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(benzimidazole derivs. for treatment of systemic inflammatory response syndrome)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[4-cyanophenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

11549293



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:467997 HCAPLUS

DOCUMENT NUMBER: 135:61338

TITLE: Preparation of 2-(4-amidinophenylaminomethyl)benzimidazoles as antithrombotics

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

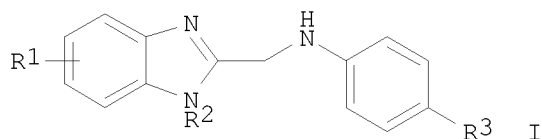
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| DE 19962329 | A1 | 20010628 | DE 1999-19962329 | 19991223 |
| US 2001006977 | A1 | 20010705 | US 2000-735159 | 20001212 |
| US 6451832 | B2 | 20020917 | | |
| CA 2393916 | A1 | 20010705 | CA 2000-2393916 | 20001216 |
| WO 2001047896 | A1 | 20010705 | WO 2000-EP12841 | 20001216 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1244636 | A1 | 20021002 | EP 2000-983342 | 20001216 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003519129 | T | 20030617 | JP 2001-549368 | 20001216 |
| MX 2002PA06299 | A | 20021209 | MX 2002-PA6299 | 20020621 |
| US 2003004356 | A1 | 20030102 | US 2002-188952 | 20020703 |
| US 6593355 | B2 | 20030715 | | |

PRIORITY APPLN. INFO.: DE 1999-19962329 A 19991223
US 2000-175163P P 20000107
US 2000-735159 A1 20001212
WO 2000-EP12841 W 20001216

OTHER SOURCE(S): MARPAT 135:61338

11549293

GI



AB Title compds. [I; R1 = alkyl, fluoroalkyl, pyrrolidinocarbonylalkyl, 2,5-dihydropyrrolocarbonylalkyl, aminoalkyl, etc., R2 = alkyl; R3 = carbamidoyl, cyano, (substituted) oxadiazolyl, etc.] and stereoisomers thereof were prepared. Thus, (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(ethoxycarbonylmethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride in H₂O was stirred with NaOH for 45 min. at room temperature followed by addition of HCl up to pH = 3.5 to give 100% (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride. Several I extended (doubled) the activated partial thromboplastin time (aPTT) with ED₅₀ = 0.12-0.22 μ M.

IT 253797-00-1P 345957-57-5P

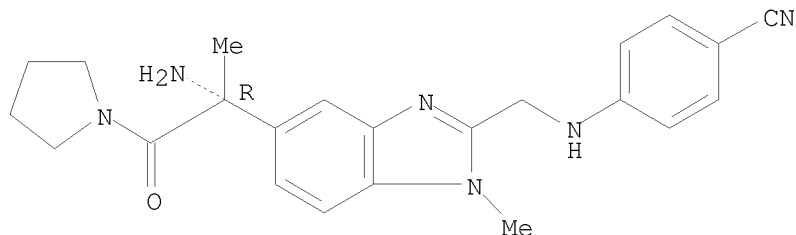
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[4-(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

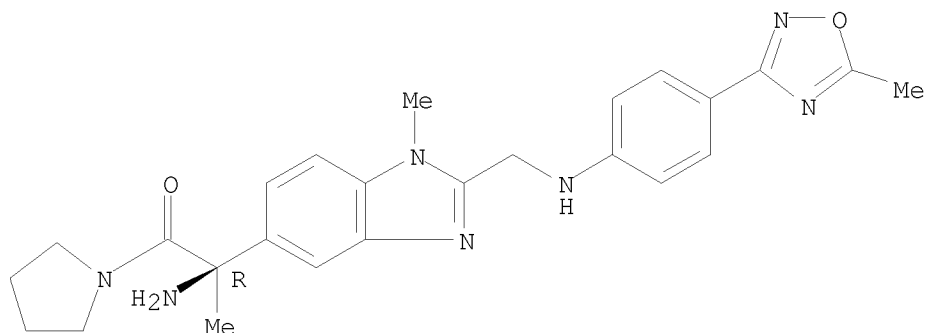
Absolute stereochemistry.



RN 345957-57-5 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:34881 HCAPLUS

DOCUMENT NUMBER: 132:78556

TITLE: Preparation of amidinophenylaminomethylenzimidazoles as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hauel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2000001704 | A2 | 20000113 | WO 1999-EP4531 | 19990701 |
| WO 2000001704 | A3 | 20000406 | | |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
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| DE 19829964 | A1 | 20000105 | DE 1998-19829964 | 19980704 |
| DE 19857202 | A1 | 20000615 | DE 1998-19857202 | 19981211 |
| DE 19912690 | A1 | 20000921 | DE 1999-19912690 | 19990320 |
| CA 2337804 | A1 | 20000113 | CA 1999-2337804 | 19990701 |
| AU 9949033 | A | 20000124 | AU 1999-49033 | 19990701 |
| AU 763094 | B2 | 20030710 | | |
| BR 9911826 | A | 20010327 | BR 1999-11826 | 19990701 |
| EP 1095025 | A2 | 20010502 | EP 1999-932765 | 19990701 |
| EP 1095025 | B1 | 20021211 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
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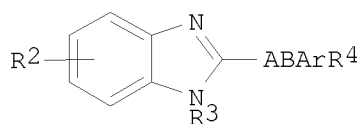
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| NZ 509625 | A | 20030829 | NZ 1999-509625 | 19990701 |
| SK 283744 | B6 | 20031202 | SK 2001-8 | 19990701 |
| MX 2000PA12819 | A | 20040603 | MX 2000-PA12819 | 20001219 |
| IN 2000MN00760 | A | 20070615 | IN 2000-MN760 | 20001221 |
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| BG 105111 | A | 20011231 | BG 2001-105111 | 20010103 |
| HR 2001000007 | A1 | 20011231 | HR 2001-7 | 20010103 |
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| HK 1036976 | A1 | 20041119 | HK 2001-107199 | 20011015 |

PRIORITY APPLN. INFO.:

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| DE 1998-19829964 | A | 19980704 |
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OTHER SOURCE(S): MARPAT 132:78556
GI



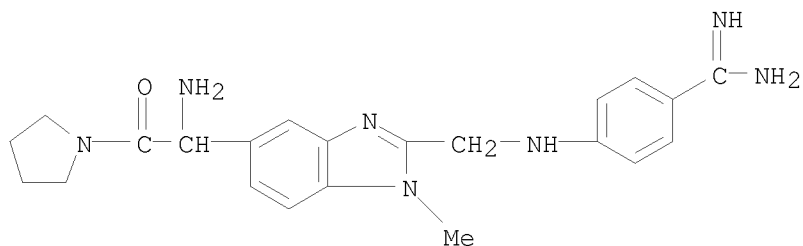
AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylenes, pyridinylenes, pyrazinylenes, pyrimidinylenes, pyridazinylenes; A = alkylene; B = O, S, CH₂, CO, imino, SO, SO₂; R₂ = R₁COX, etc.; R₁ = alkoxy, amino, alkylamino, dialkylamino, etc.; X = cycloalkylene; R₃ = H, alkyl; R₄ = cyano, (substituted) amidino], were prepared. Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride (multistep preparation given) showed aPTT (partial thrombin time) ED₂₀₀ = 0.12 μM.

IT 253430-83-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

RN 253430-83-0 HCAPLUS

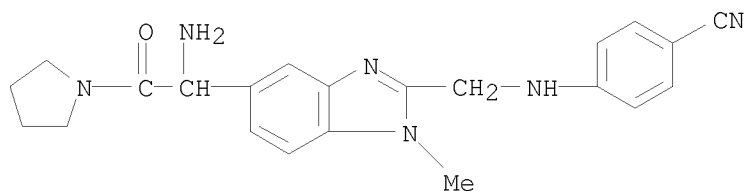
CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

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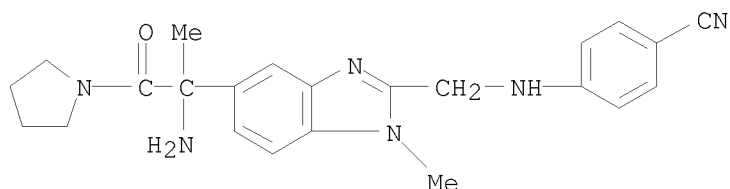


● HCl

IT 253431-62-8P 253431-65-1P 253796-87-1P
253797-00-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)
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benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)

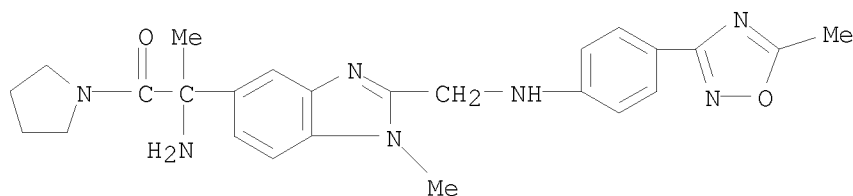


RN 253431-65-1 HCAPLUS
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RN 253796-87-1 HCAPLUS
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INDEX NAME)

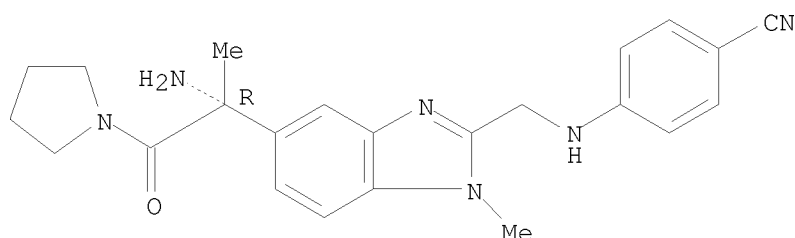
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RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[4-cyanophenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:15648 HCAPLUS

DOCUMENT NUMBER: 132:64257

TITLE: Preparation of amidinophenylaminomethylbenzimidazoles and related compounds as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Huel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 38 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|------------------|----------|
| DE 19829964 | A1 | 20000105 | DE 1998-19829964 | 19980704 |
| US 6248770 | B1 | 20010619 | US 1999-338970 | 19990624 |
| TW 248435 | B | 20060201 | TW 1999-88110926 | 19990629 |
| CA 2337804 | A1 | 20000113 | CA 1999-2337804 | 19990701 |
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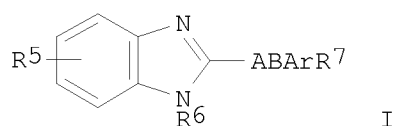
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,

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 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

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| AU 763094 | B2 | 20030710 | | |
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| EP 1095025 | A2 | 20010502 | EP 1999-932765 | 19990701 |
| EP 1095025 | B1 | 20021211 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| TR 200100148 | T2 | 20010921 | TR 2001-148 | 19990701 |
| EE 200100009 | A | 20020617 | EE 2001-9 | 19990701 |
| EE 4236 | B1 | 20040216 | | |
| HU 2002000710 | A2 | 20020629 | HU 2002-710 | 19990701 |
| HU 2002000710 | A3 | 20030528 | | |
| JP 2002519429 | T | 20020702 | JP 2000-558106 | 19990701 |
| AT 229511 | T | 20021215 | AT 1999-932765 | 19990701 |
| PT 1095025 | T | 20030430 | PT 1999-932765 | 19990701 |
| ES 2188192 | T3 | 20030616 | ES 1999-932765 | 19990701 |
| NZ 509625 | A | 20030829 | NZ 1999-509625 | 19990701 |
| SK 283744 | B6 | 20031202 | SK 2001-8 | 19990701 |
| ZA 2000007624 | A | 20010716 | ZA 2000-7624 | 20001219 |
| MX 2000PA12819 | A | 20040603 | MX 2000-PA12819 | 20001219 |
| IN 2000MN00760 | A | 20070615 | IN 2000-MN760 | 20001221 |
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| BG 105111 | A | 20011231 | BG 2001-105111 | 20010103 |
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| HK 1036976 | A1 | 20041119 | HK 2001-107199 | 20011015 |
| PRIORITY APPLN. INFO.: | | | DE 1998-19829964 | A 19980704 |
| | | | US 1998-92215P | P 19980709 |
| | | | DE 1998-19857202 | A 19981211 |
| | | | DE 1999-19912690 | A 19990320 |
| | | | WO 1999-EP4531 | W 19990701 |

OTHER SOURCE(S): MARPAT 132:64257
 GI



AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylenes, pyridinylene, etc.; A = alkylene; B = O, S, CH₂, CO, imino, sulfinyl, sulfonyl, etc.; R₅ = R₁COX; X = cycloalkylene; R₁ = (substituted) (di)alkylamino, cycloalkyleneimino, morpholino, piperazino; R₅ = H, alkyl; R₇ = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride [prepared starting from 1-(4-chlorophenyl)-1-cyclopropanecarboxylic acid] showed aPTT (partial thrombin time) ED₂₀₀ = 0.12 μM.

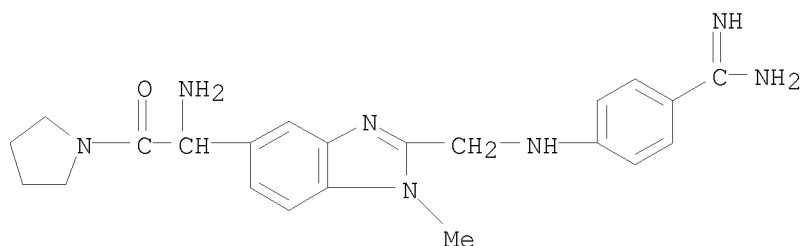
IT 253430-83-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

11549293

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(preparation of amidinophenylaminomethylbenzimidazoles and related compds.
as antithrombotics)
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RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 253431-62-8P 253431-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

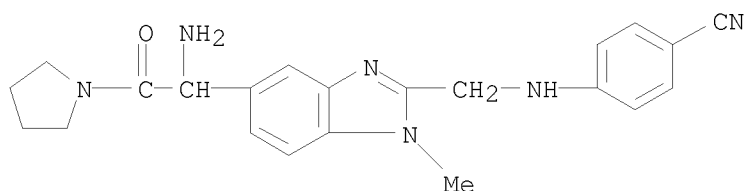
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(1) 1-aminophenylaminomethylbenzimidazoles and related compds.
    (preparation of amidinophenylaminomethylbenzimidazoles and related compds.
    as antithrombotics)

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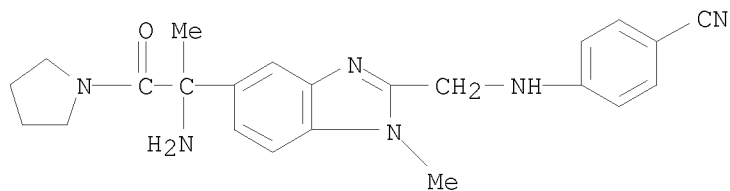
RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)



RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[4-cyanophenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)



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=> d 113 ibib abs hitstr tot

L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2864 HCAPLUS

DOCUMENT NUMBER: 140:59935

TITLE: Preparation of crystalline (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-pyrrolidinocarbonyl)-ethyl)-benzimidazole esters and/or salts for use as antithrombotic agents

INVENTOR(S): Linz, Guenter; Sieger, Peter; Schreiner, Gunnar; Rall, Werner; Schmid, Rolf

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma Gmbh & Co. Kg, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2004000818 | A1 | 20031231 | WO 2003-EP6317 | 20030616 <-- |
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| DE 10227666 | A1 | 20040108 | DE 2002-10227666 | 20020620 |
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| AU 2003237945 | A1 | 20040106 | AU 2003-237945 | 20030616 |
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| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2006508037 | T | 20060309 | JP 2004-514726 | 20030616 |
| US 2004010026 | A1 | 20040115 | US 2003-463033 | 20030617 |
| US 7169934 | B2 | 20070130 | | |
| US 2007099974 | A1 | 20070503 | US 2006-610187 | 20061213 |
| US 7294721 | B2 | 20071113 | | |
| PRIORITY APPLN. INFO.: | | | DE 2002-10227666 | A 20020620 |
| | | | US 2002-395188P | P 20020711 |
| | | | WO 2003-EP6317 | W 20030616 |
| | | | US 2003-463033 | A3 20030617 |

OTHER SOURCE(S): MARPAT 140:59935

AB The invention relates to the crystalline forms of compds. (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-(1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)-ethyl)-benzimidazole and monohydrochloride thereof, to methods for the production thereof, and to their use as medicaments having an antithrombotic action (no data). Thus, (R)-2-(4-cyanophenylaminomethyl)-1-methyl-5-[1-amino-1-(pyrrolidineocarbonyl)-ethyl]benzimidazole was simultaneously N-alkylated and CN-reduced/aminated

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using BrCH₂C(O)OCH₂CH₂CH₃ in N-methylpyrrolidinone, Pr acetate, and diisopropylethylamine; the resulting ester product was first isolated as the hydrochloride, and then as the 4-toluenesulfonic acid salt, which was deesterified to give the free base. The Et ester was similarly prepared. Crystal structure data were given for the free base and the monohydrochloride forms.

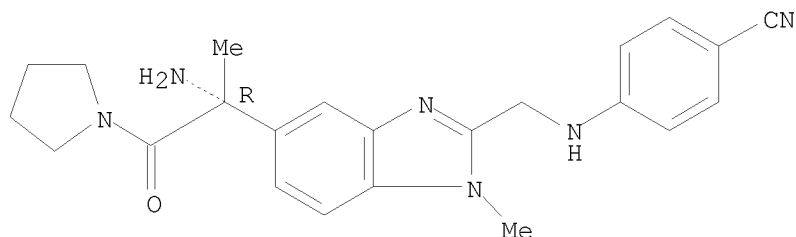
IT 253797-00-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and x-ray crystallog. structure of 2-(4-amidinophenylaminomethyl))-1-methyl-5-(1-(carboxymethylamino)benzimidazole esters and/or salts for use as antithrombotic agents)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:2693 HCAPLUS

DOCUMENT NUMBER: 140:53413

TITLE: Benzimidazole derivatives for the treatment of systemic inflammatory response syndrome

INVENTOR(S): Ries, Uwe; Wienen, Wolfgang; Schuly, Uwe

PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2004000310 | A1 | 20031231 | WO 2003-EP6318 | 20030616 <-- |
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| DE 10227668 | A1 | 20040108 | DE 2002-10227668 | 20020620 |
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| AU 2003278945 | A1 | 20040106 | AU 2003-278945 | 20030616 |
| EP 1517687 | A1 | 20050330 | EP 2003-740255 | 20030616 |
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| JP 2006514603 | T | 20060511 | JP 2004-514727 | 20030616 |
| AT 365038 | T | 20070715 | AT 2003-740255 | 20030616 |
| ES 2289305 | T3 | 20080201 | ES 2003-740255 | 20030616 |
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| PRIORITY APPLN. INFO.: | | | DE 2002-10227668 | A 20020620 |
| | | | US 2002-400166P | P 20020801 |
| | | | WO 2003-EP6318 | W 20030616 |

OTHER SOURCE(S): MARPAT 140:53413

AB The invention discloses the use of benzimidazole derivs. for producing a medicament used for treating the systemic inflammatory response syndrome and particularly sepsis. Preparation of (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-(pyrrolidinocarbonyl)ethyl]benzimidazole hydrochloride is described.

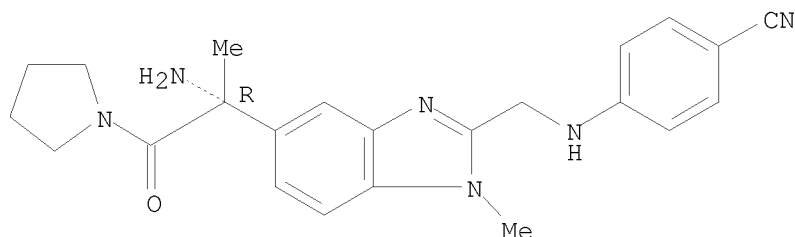
IT 253797-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(benzimidazole derivs. for treatment of systemic inflammatory response syndrome)

RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[4-(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:467997 HCAPLUS

DOCUMENT NUMBER: 135:61338

TITLE: Preparation of 2-(4-amidinophenylaminomethyl)benzimidazoles as antithrombotics

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Hael, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

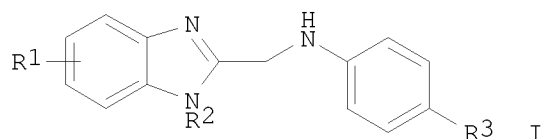
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| US 2001006977 | A1 | 20010705 | US 2000-735159 | 20001212 <-- |
| US 6451832 | B2 | 20020917 | | |
| CA 2393916 | A1 | 20010705 | CA 2000-2393916 | 20001216 <-- |
| WO 2001047896 | A1 | 20010705 | WO 2000-EP12841 | 20001216 <-- |
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| EP 1244636 | A1 | 20021002 | EP 2000-983342 | 20001216 <-- |
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| JP 2003519129 | T | 20030617 | JP 2001-549368 | 20001216 <-- |
| MX 2002PA06299 | A | 20021209 | MX 2002-PA6299 | 20020621 <-- |
| US 2003004356 | A1 | 20030102 | US 2002-188952 | 20020703 <-- |
| US 6593355 | B2 | 20030715 | | |

PRIORITY APPLN. INFO.:

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| US 2000-175163P | P | 20000107 |
| US 2000-735159 | A1 | 20001212 |
| WO 2000-EP12841 | W | 20001216 |

OTHER SOURCE(S): MARPAT 135:61338

GI



AB Title compds. [I; R1 = alkyl, fluoroalkyl, pyrrolidinocarbonylalkyl, 2,5-dihydropyrrolocarbonylalkyl, aminoalkyl, etc., R2 = alkyl; R3 = carbamidoyl, cyano, (substituted) oxadiazolyl, etc.] and stereoisomers thereof were prepared. Thus, (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(ethoxycarbonylmethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride in H₂O was stirred with NaOH for 45 min. at room temperature followed by addition of HCl up to pH = 3.5 to give 100% (R)-2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(carboxymethylamino)-1-[(R,S)-2-methylpyrrolidinocarbonyl]ethyl]benzimidazole dihydrochloride. Several I extended (doubled) the activated partial thromboplastin time (aPTT) with ED₂₀₀ = 0.12-0.22 μ M.

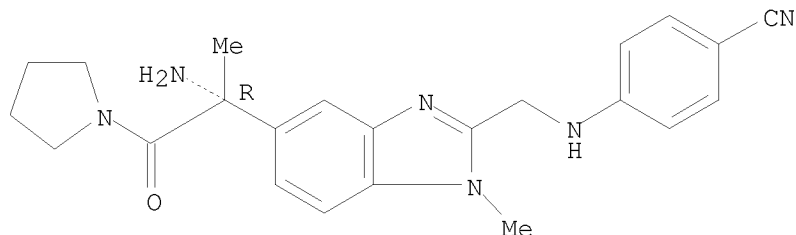
IT 253797-00-1P 345957-57-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amidinophenylaminomethylbenzimidazoles as antithrombotics)

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RN 253797-00-1 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[4-(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

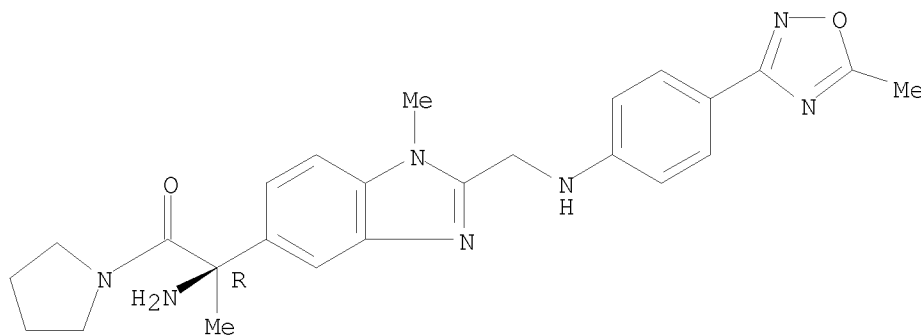
Absolute stereochemistry.



RN 345957-57-5 HCAPLUS

CN Pyrrolidine, 1-[(2R)-2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:34881 HCAPLUS

DOCUMENT NUMBER: 132:78556

TITLE: Preparation of amidinophenylaminomethylenzimidazoles as antithrombotics.

INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Huel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2000001704 | A2 | 20000113 | WO 1999-EP4531 | 19990701 <-- |

WO 2000001704 A3 20000406

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JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
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| AU 9949033 | A | 20000124 | AU 1999-49033 | 19990701 <-- |
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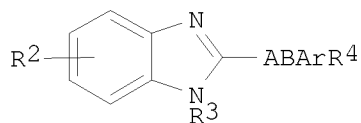
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PRIORITY APPLN. INFO.:

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| DE 1998-19829964 | A | 19980704 |
| DE 1998-19857202 | A | 19981211 |
| DE 1999-19912690 | A | 19990320 |
| WO 1999-EP4531 | W | 19990701 |

OTHER SOURCE(S): MARPAT 132:78556
GI



I

AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, pyrazinylene, pyrimidinylene, pyridazinylene; A = alkylene; B = O, S, CH₂, CO, imino, SO, SO₂; R₂ = R₁COX, etc.; R₁ = alkoxy, amino, alkylamino, dialkylamino, etc.; X = cycloalkylene; R₃ = H, alkyl; R₄ = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride (multistep preparation given) showed aPTT (partial thrombin time) ED₂₀₀ = 0.12 μM.

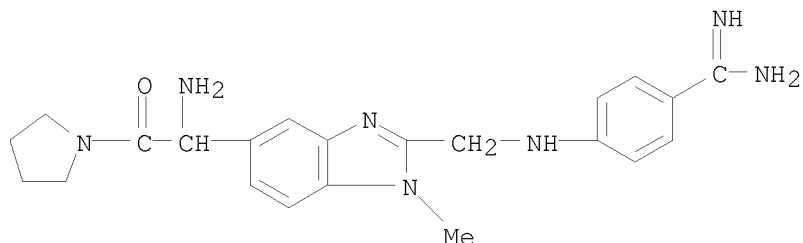
IT 253430-83-0P

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)



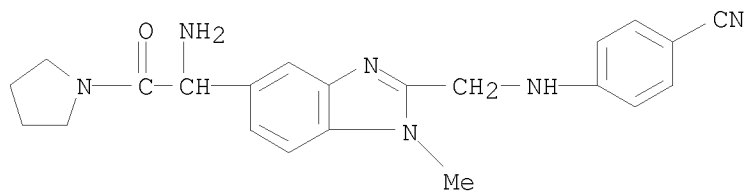
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IT 253431-62-8P 253431-65-1P 253796-87-1P
253797-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amidinophenylaminomethylenzimidazoles as antithrombotics)

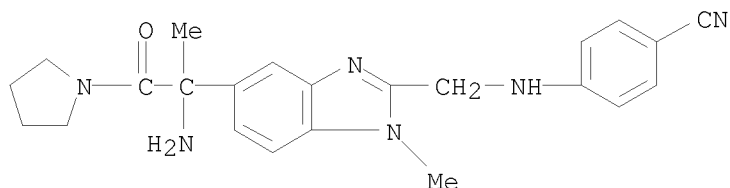
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CN Pyrrolidine, 1-[amino[2-[[[4-(cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)



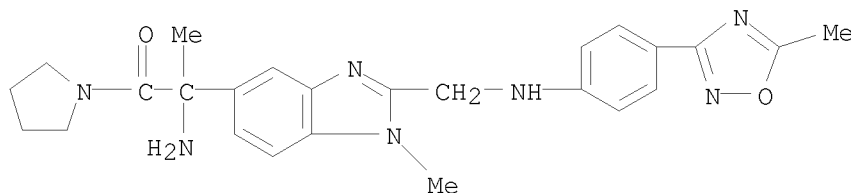
RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[[4-(cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)



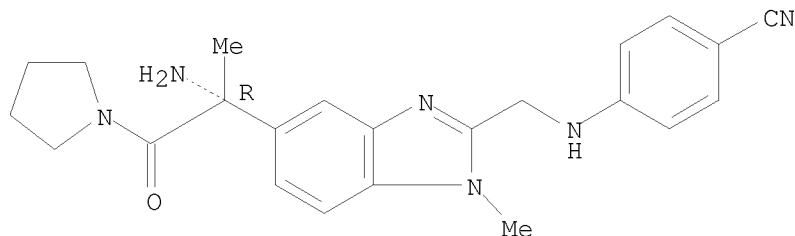
11549293

RN 253796-87-1 HCAPLUS
CN Pyrrolidine, 1-[2-amino-2-[1-methyl-2-[[[4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]amino]methyl]-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)



RN 253797-00-1 HCAPLUS
CN Pyrrolidine, 1-[(2R)-2-amino-2-[2-[[[4-(4-cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:15648 HCAPLUS
DOCUMENT NUMBER: 132:64257
TITLE: Preparation of amidinophenylaminomethylbenzimidazoles and related compounds as antithrombotics.
INVENTOR(S): Ries, Uwe; Kauffmann, Iris; Huel, Norbert; Priepke, Henning; Nar, Herbert; Stassen, Jean Marie; Wienen, Wolfgang
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: Ger. Offen., 38 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| DE 19829964 | A1 | 20000105 | DE 1998-19829964 | 19980704 <-- |
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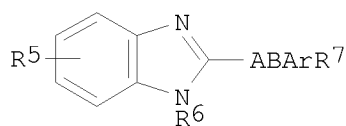
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HK 1036976 A1 20041119 HK 2001-107199 20011015

PRIORITY APPLN. INFO.:

DE 1998-19829964 A 19980704
US 1998-92215P P 19980709
DE 1998-19857202 A 19981211
DE 1999-19912690 A 19990320
WO 1999-EP4531 W 19990701

OTHER SOURCE(S): MARPAT 132:64257
GI



I

AB Title compds. [I; Ar = (substituted) phenylene, naphthylene, thienylene, thiazolylylene, pyridinylylene, etc.; A = alkylene; B = O, S, CH2, CO, imino, sulfinyl, sulfonyl, etc.; R5 = R1COX; X = cycloalkylene; R1 = (substituted) (di)alkylamino, cycloalkyleneimino, morpholino, piperazino; R5 = H, alkyl; R7 = cyano, (substituted) amidino], were prepared Thus, 2-(4-amidinophenylaminomethyl)-1-methyl-5-[1-(pyrrolidin-1-ylcarbonyl)cyclopropyl]benzimidazole hydrochloride [prepared starting from

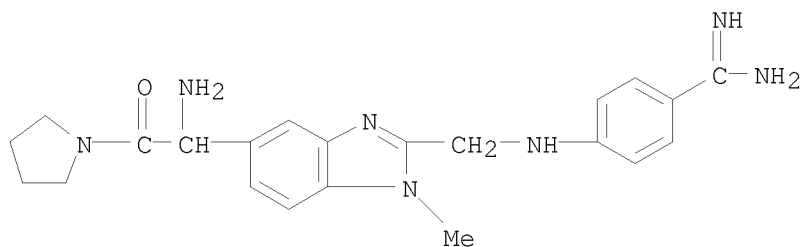
11549293

1-(4-chlorophenyl)-1-cyclopropanecarboxylic acid] showed aPTT (partial thrombin time) ED200 = 0.12 μ M.

IT 253430-83-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

RN 253430-83-0 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(aminoiminomethyl)phenyl]amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]-, monohydrochloride (9CI) (CA INDEX NAME)

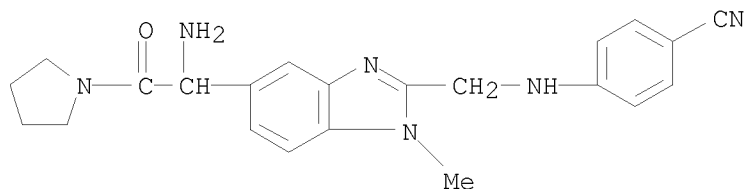


● HCl

IT 253431-62-8P 253431-65-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amidinophenylaminomethylbenzimidazoles and related compds. as antithrombotics)

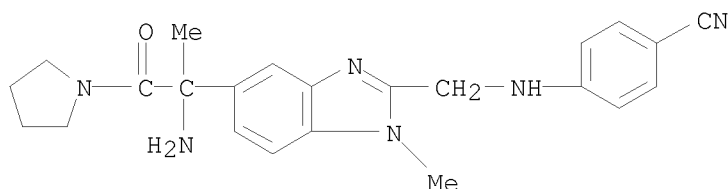
RN 253431-62-8 HCAPLUS

CN Pyrrolidine, 1-[amino[2-[[[4-(cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]acetyl]- (9CI) (CA INDEX NAME)



RN 253431-65-1 HCAPLUS

CN Pyrrolidine, 1-[2-amino-2-[2-[[[4-(cyanophenyl)amino]methyl]-1-methyl-1H-benzimidazol-5-yl]-1-oxopropyl]- (9CI) (CA INDEX NAME)



=> d 114 ibib abs hitstr tot

L14 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1156435 HCAPLUS

DOCUMENT NUMBER: 142:86665

TITLE: Cyclohexylglycine derivatives as dipeptidyl
peptidase IV inhibitors for the treatment or
prevention of diabetes and other dipeptidyl
peptidase IV-associated diseases

INVENTOR(S): Edmondson, Scott D.; Mastracchio, Anthony; Parmee,
Emma R.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2004112701 | A2 | 20041229 | WO 2004-US18718 | 20040610 |
| WO 2004112701 | A3 | 20050210 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2004249163 | A1 | 20041229 | AU 2004-249163 | 20040610 |
| CA 2527806 | A1 | 20041229 | CA 2004-2527806 | 20040610 |
| EP 1638950 | A2 | 20060329 | EP 2004-755091 | 20040610 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | |
| CN 1809544 | A | 20060726 | CN 2004-80016974 | 20040610 |
| JP 2006528131 | T | 20061214 | JP 2006-517234 | 20040610 |
| IN 2005DN05637 | A | 20080201 | IN 2005-DN5637 | 20051205 |
| US 2007021477 | A1 | 20070125 | US 2005-560771 | 20051213 |
| PRIORITY APPLN. INFO.: | | | US 2003-479246P | P 20030617 |
| | | | WO 2004-US18718 | W 20040610 |

OTHER SOURCE(S): MARPAT 142:86665

AB The invention discloses cyclohexylglycine derivs. which are inhibitors of dipeptidyl peptidase IV which are useful in the treatment or prevention of diseases in which dipeptidyl peptidase IV is involved, such as diabetes and particularly type 2 diabetes. The invention also discloses pharmaceutical compns. comprising these compds. and the use of these compds. and compns. in the prevention or treatment of such diseases in which the dipeptidyl peptidase IV enzyme is involved. Preparation of compds. and intermediates is described.

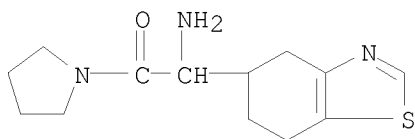
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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cyclohexylglycine derivs. as dipeptidyl peptidase IV inhibitors for treatment or prevention of diabetes and other dipeptidyl peptidase IV-associated diseases)

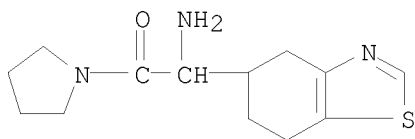
RN 815580-74-6 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI)
(CA INDEX NAME)



RN 815580-74-6 HCAPLUS

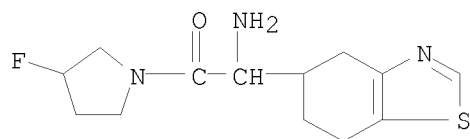
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]- (9CI)
(CA INDEX NAME)



RN 815580-75-7 HCAPLUS

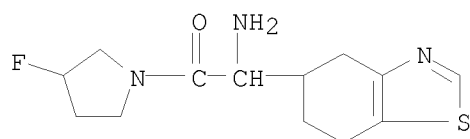
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro- (9CI) (CA INDEX NAME)

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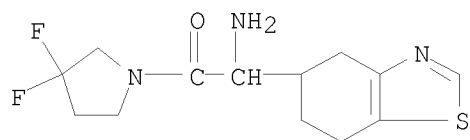
RN 815580-75-7 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-fluoro-
(9CI) (CA INDEX NAME)



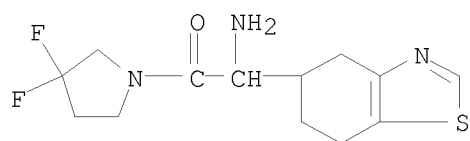
RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)



RN 815580-76-8 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)

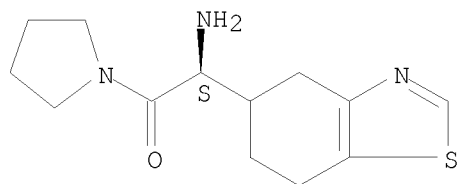


RN 815580-77-9 HCAPLUS

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(9CI) (CA INDEX NAME)

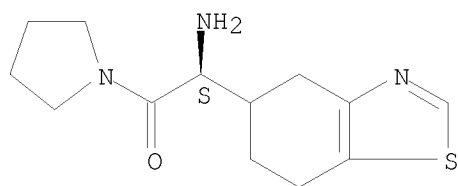
Absolute stereochemistry.

11549293



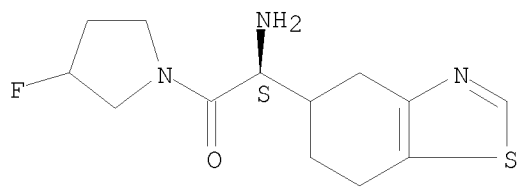
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CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



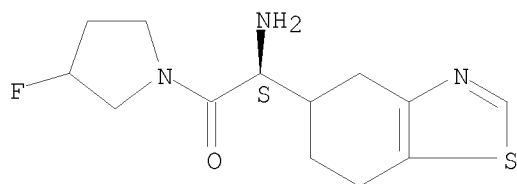
RN 815580-79-1 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-
fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 815580-79-1 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3-
fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

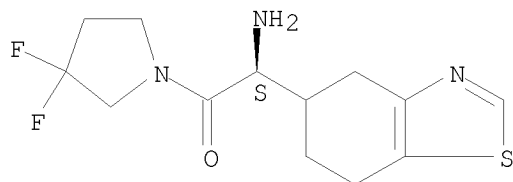


RN 815580-80-4 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-
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difluoro- (9CI) (CA INDEX NAME)

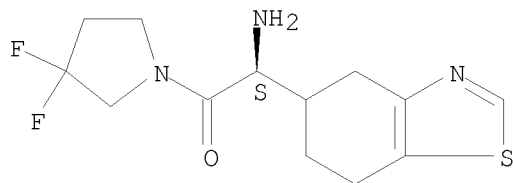
Absolute stereochemistry.



RN 815580-80-4 HCAPLUS

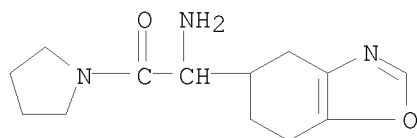
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzothiazolyl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



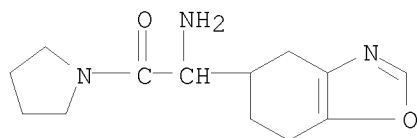
RN 815580-87-1 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)



RN 815580-87-1 HCAPLUS

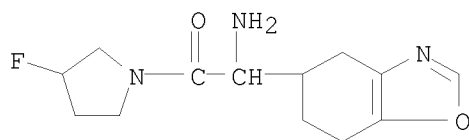
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]- (9CI) (CA INDEX NAME)



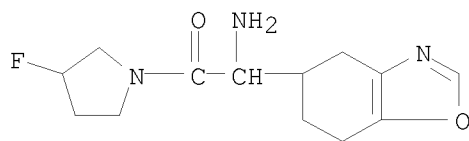
RN 815580-88-2 HCAPLUS

CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro- (9CI) (CA INDEX NAME)

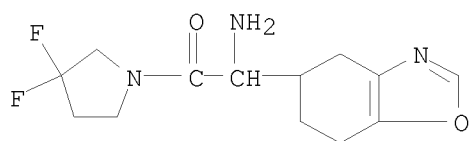
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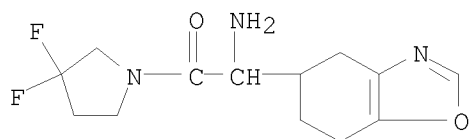
RN 815580-88-2 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-fluoro-
(9CI) (CA INDEX NAME)



RN 815580-89-3 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)

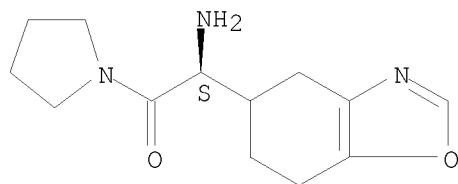


RN 815580-89-3 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3,3-
difluoro- (9CI) (CA INDEX NAME)



RN 815580-90-6 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

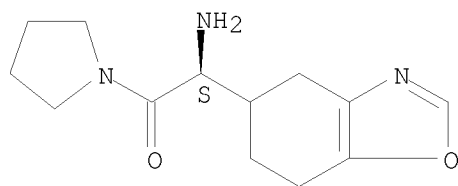


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RN 815580-90-6 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-
(9CI) (CA INDEX NAME)

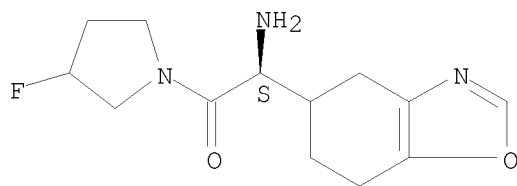
Absolute stereochemistry.



RN 815580-91-7 HCAPLUS

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fluoro- (9CI) (CA INDEX NAME)

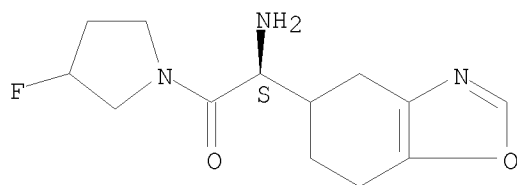
Absolute stereochemistry.



RN 815580-91-7 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-5-benzoxazolyl)acetyl]-3-
fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

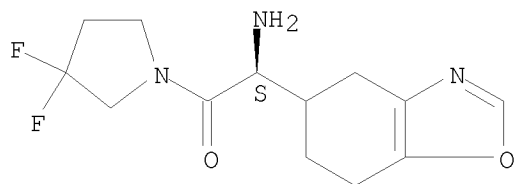


RN 815580-92-8 HCAPLUS

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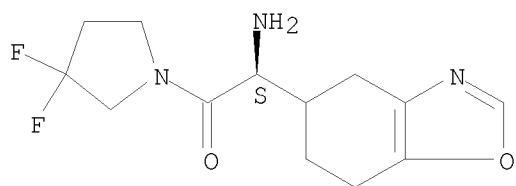
Absolute stereochemistry.

11549293

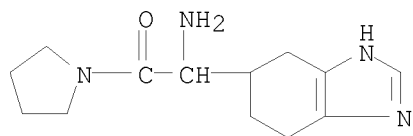


RN 815580-92-8 HCAPLUS
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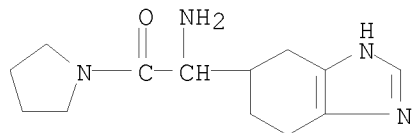
Absolute stereochemistry.



RN 815580-93-9 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]- (9CI) (CA INDEX NAME)

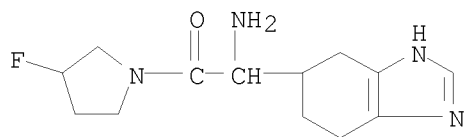


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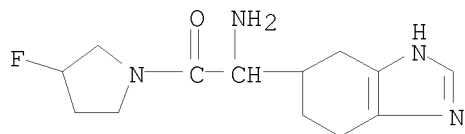


RN 815580-94-0 HCAPLUS
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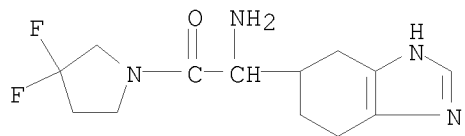
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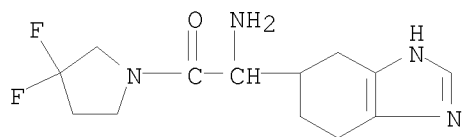
RN 815580-94-0 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3-fluoro- (9CI) (CA INDEX NAME)



RN 815580-95-1 HCAPLUS
CN Pyrrolidine, 1-[amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)



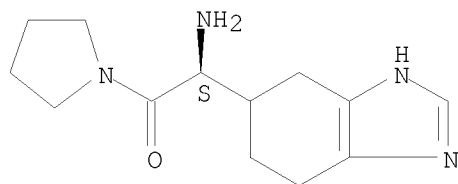
RN 815580-95-1 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-3,3-difluoro- (9CI) (CA INDEX NAME)



RN 815580-96-2 HCAPLUS
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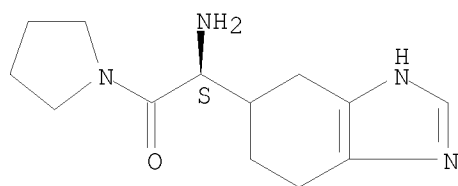
Absolute stereochemistry.

11549293



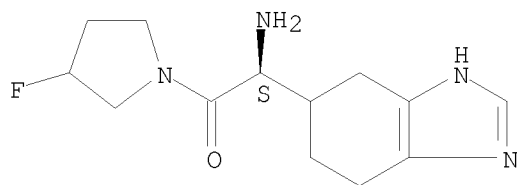
RN 815580-96-2 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



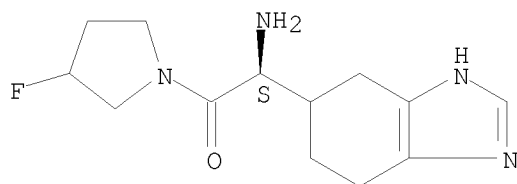
RN 815580-97-3 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-
3-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 815580-97-3 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-
3-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

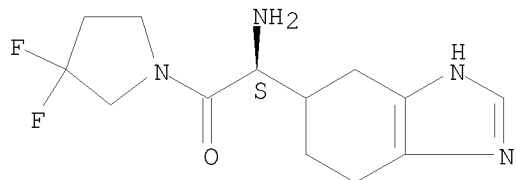


RN 815580-98-4 HCAPLUS
CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-

11549293

3,3-difluoro- (9CI) (CA INDEX NAME)

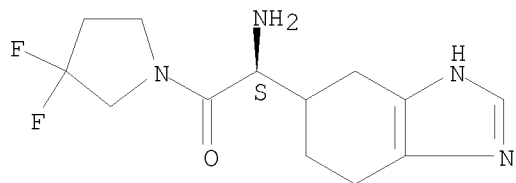
Absolute stereochemistry.



RN 815580-98-4 HCAPLUS

CN Pyrrolidine, 1-[(2S)-amino(4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)acetyl]-
3,3-difluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

81.54

671.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-9.60

-13.60

STN INTERNATIONAL LOGOFF AT 11:15:04 ON 14 FEB 2008